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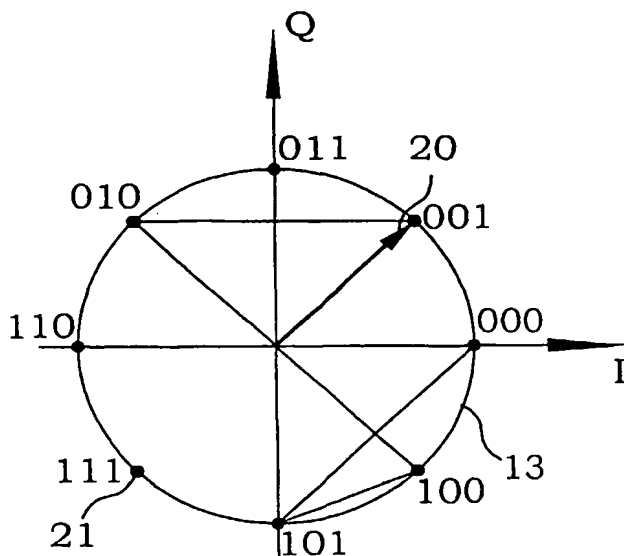
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(54) Title: MULTIMODULATION TRANSMITTER



(57) Abstract: The present invention discloses a double TRU (Transceiver Unit) (45). The output signals from the power amplifiers (64, 84) are combined to one common output signal provided to an antenna arrangement (91). A DSP (Digital Signal Processor) (52, 72) of each TRU (50, 70) comprises means for a constant-envelope modulation scheme (54, 74) and a non-constant envelope scheme (53, 73). The DSP:s (52, 72) select the modulation scheme according to modulation information (49, 69). In such a way, a switching between different modulation schemes can be performed even on a time-slot basis. For non-constant-envelope modulation, the modulated signal is separated into two component signals. Each TRU (50, 70) takes care of the amplification of one component. A phase compensation of at least one of the TRU:s (50, 70) is performed in order to correct for different paths of phases of the power amplifiers (64, 84). The non-constant envelope modulated signal can also be a multi-carrier signal, e.g. of two or more constant-envelope signals. Also a TCC (Transmitter Coherent Combining) operation is achievable.

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